

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

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OPTICAL COMMUNICATIONS GROUP, INC.,

Case No. 11-cv-04439-NRB

Plaintiff,

**DECLARATION OF
ALAN BLUME**

-against-

M/V AMBASSADOR, its engines, boilers, furniture,
tackle, apparel, etc., *in rem* and MARBULK
CANADA, INC., *in personam*,

Defendants.
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ALAN BLUME, declares under penalty of perjury under the laws of the United States of America that:

1. I am Principal of Blume Maritime, a marine safety consulting firm specializing in marine accident investigations and analysis and have over 25 years of experience. I am a retired United States Coast Guard officer, most recently as Sector Long Island Prevention Department Head. In such capacity I was responsible for all Coast Guard operations related to preventing and investigating marine casualties in and around the Long Island Sound. My resume is attached. (Exhibit 1)
2. I was asked by Optical Communications Group, Inc. to review the M/V AMBASSADOR documentation and voyage data recorder (VDR) data and the ship. I was evaluating the facts surrounding the damage to OCG's optical cable, which had been severed by an anchor strike and dragging on the sea bottom of New York Harbor.
3. I reviewed various documents including a disc containing information from the ship's voyage data recorder, the ship's general arrangement plans, statements to the United States Coast Guard, deck log and information concerning the wiring of the VDR system. I was not provided with the ship's nautical chart used for the transit of

New York harbor on 11 April 2010, which I would have liked to review. I also attended an on-board inspection of the vessel.

4. I understand that AMBASSADOR interests suggest that their analysis of a “sound” heard from the vessel’s VDR recording establishes that the anchor was mistakenly dropped at exactly 10:32 and 12 seconds, and that at this time, the ship’s bow was exactly 33 yards to the south of the demarcation line of the cable area. This type of ‘precision’ based on a sound on the recording is not accurate or reliable. From my review of the data, the anchor was most likely already in the water and falling to the bottom when the sound is first heard on the VDR microphone.

5. By listening to the VDR recording, a listener can *estimate* the time and location of the vessel when a sound is heard, but there are numerous variables which will effect when a sound is intercepted and recorded by the VDR system, including the direction and speed of the wind, speed and direction of the ship, humidity, sensitivity of the recording system and type of noise.

6. Anyone listening to a “sound” recorded by the VDR cannot state precisely when the anchor was let go based on the sound, or how much of the anchor chain was already over the side of the ship before the sound was initially heard.

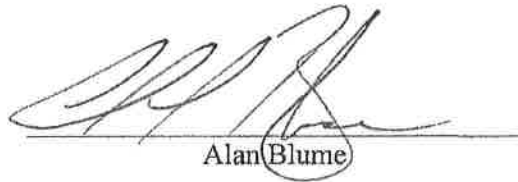
7. The VDR is also connected to the ship’s global positioning system (GPS). The VDR and GPS systems are not designed to provide pin-point accuracy. In fact, there is a published margin of error of approximately 7.8 meters at a 95% confidence level for GPS systems.¹ Information provided by the National Oceanic and Atmospheric Administration states that depending on satellite configuration and atmospheric

¹ Department of Defense, Global Positioning System Standard Positioning Service Performance Standard 22 (2008).

conditions the accuracy of GPS may be within 10 to 15 meters (10.9 to 16.4 yards).² This indicates that AMBASSADOR's GPS systems cannot be relied on with 100% precision.

8. Here there may be an even greater margin of error in the ship's electronic data. My investigation revealed that the GPS units aboard this ship were improperly spliced to a connection with a single antenna, which could potentially lead to reduced signal and reduced accuracy. In June 2010, after the incident, the ship's GPS units were rewired to correct this problem.

Dated: September 19, 2012



Alan Blume

² See National Oceanic and Atmospheric Administration, Office of Coast Survey <http://www.nauticalcharts.noaa.gov/nsd/DGPSchart.html>.

EXHIBIT "1"

Alan L. Blume

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SUMMARY OF EXPERIENCE

High-performing marine safety professional with over 25 years of experience in marine/vessel casualty investigations and inspections / surveys, emergency incident response and management, and waterways management. Experienced professional working with marine industry, legal counsel, and government agency representatives.

PROFESSIONAL EXPERIENCE

Blume Maritime, LLC, Cheshire, Connecticut (Sep 2007 – present)

Principal

Marine safety consulting firm specializing in vessel regulatory compliance, marine accident investigations and analysis, and waterways management, providing guidance regarding regulatory compliance issues for U.S. and foreign-flag vessel operators as well as serving as expert witness for legal counsel.

International Registries, Inc., Reston, Virginia (Sep 2007 – present)

Marine Investigations Manager

Responsible for the conduct of marine safety investigations conducted worldwide on behalf of the Maritime Administrator of the Republic of the Marshall Islands. Member of flag State investigation team for DEEPWATER HORIZON. Work closely with representatives of other flag-States as well as port-States. Serves as representative to the Maritime Accident Investigations Internal Forum (elected Assistant Chairman in June 2012) and member of the Marshall Islands' delegations for the International Maritime Organization's (IMO) Flag State Implementation, Navigation Safety Sub-committee, and Communications and Search and Rescue Sub-committees. Provides technical expertise regarding navigation systems and vessel inspections.

Member, Connecticut Pilot Commission (October 1, 2008 – present)

U.S. Coast Guard Sector Long Island Sound, New Haven, Connecticut (2003 – 2007)

Prevention Department Head

Responsible for all Coast Guard operations related to preventing maritime casualties, security incidents and oil or hazardous material releases on and around Long Island Sound as well as offshore the south shore of Long Island including: inspections of U.S.-flag vessels, foreign-flag vessels and commercial facilities; investigations and analysis of marine casualties, oil and hazardous material releases; and waterways management, including maintenance of federal aids to navigation, ice breaking, vessel pilotage, special event permitting and waterways safety assessments.

U.S. Coast Guard Headquarters Office of Vessel Traffic Management, Washington, D.C. (2000 - 2003)

Waterways Management Safety Program Manager

Monitored and analyzed activities impacting waterway safety including: high-speed vessel operations, vessel pilotage, dredging, port and waterway development, recreational boating, special events and

Deepwater Ports. Coordinated the development of regulations, policies and equipment standards to promote port and waterway safety.

U.S. Coast Guard Marine Safety Office Anchorage, Anchorage, Alaska (1994 - 1998)

Senior Investigating Officer

Supervised marine casualty, civil penalty and suspension and revocation investigations conducted throughout western Alaska. Lead investigator for multiple, complex casualty investigations, including joint flag-state investigations.

Team Leader, South Central / Interior Team

Directed the conduct of all marine safety activities throughout 195,000 square mile area of south central and western Alaska, including: inspections of U.S. and foreign vessels as well as commercial facilities; marine casualty investigations; investigations of violations of U.S. and international safety and pollution prevention regulations; oil spill response operations; and contingency planning. Lead inspector for \$2 million project to repower and upgrade structural fire protection for Alaskan Marine Highway System ferry.

U.S. Coast Guard Marine Safety Office Puget Sound, Seattle, Washington (1992 – 1994)

Marine Inspector

Inspected U.S.-flag and foreign-flag vessels for compliance with applicable U.S. and international safety and pollution prevention regulations. Conducted plan review and new construction inspections of small passenger vessels, including passenger carrying submarines.

U.S. Coast Guard Cutter HORNBEAM (WLB 394) (1990 – 1992)

U.S. Coast Guard Cutter CAPE YORK (WPB 95332) (1984 – 1986)

U.S. Coast Guard Cutter MELLON (WHEC 717) (1983 - 1984)

Navigation watch stander

Stood navigation watches; was responsible for the maintenance of all navigation charts and publications as well as the development of voyage passage plans.

EDUCATION

University of Rhode Island, Wakefield, RI (1998 – 1999) - Masters of Marine Affairs

- Focused on federal maritime policy, marine transportation, and coastal zone management

Yale University Divinity School, New Haven, CT (1987 – 1989) - Masters of Arts (Ethics)

- Focused on issues related to ethics and public policy

University of Maine, Orono, ME (1981 – 1982, 1986 – 1987) - Bachelor of Arts

PROFESSIONAL AFFILIATIONS

Member, The Society of Naval Architects and Marine Engineers (1996 – present)

Member, International Association of Marine Investigators (2008 – present)

Member, International Navigation Association (PIANC) (2000 – present)

Associate Member, Passenger Vessel Association (2011 – present)